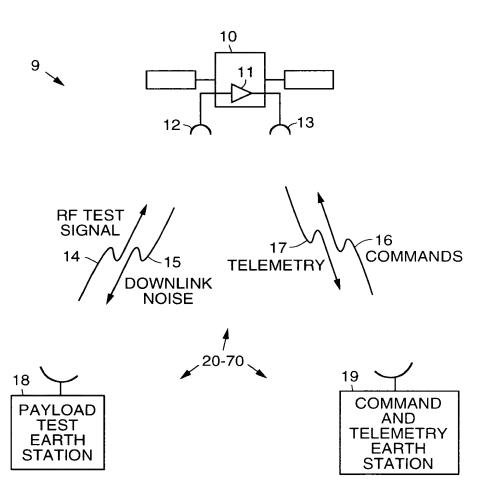
Fig. 1





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-21 A RECEIVE ANTENNA PATTERN OF A SATELLITE RECEIVE ANTENNA IS POSITIONED OVER A PAYLOAD TEST EARTH STATION -22 AN RF TEST SIGNAL IS UPLINKED FROM A PAYLOAD TEST EARTH STATION TO A RECEIVE ANTENNA ON ASATELLITE COMMANDS ARE UPLINKED FROM A TELEMETRY AND -23 COMMAND EARTH STATION TO THE SATELLITE THAT CAUSE A SLOW CONSTANT ATTITUDE TRANSLATION OF THE SATELLITE OVER PREDETERMINED ORIENTATION ANGLES THE POWER LEVEL OF THE UPLINK TEST SIGNAL 24 IS SENSED BY A TRANSPONDER ON BOARD THE SATELLITE WHILE THE SATELLITE IS SLEWED 25 DOWNLINK TELEMETRY CORRESPONDING TO THE SENSED POWER LEVEL AND ORIENTATION ANGLES ARE GENERATED ON-BOARD THE SATELLITE AND DOWNLINKED -26 THE DOWNLINKED TELEMETRY IS RECEIVED AT A TELEMETRY AND COMMAND EARTH STATION THAT IS LOCATED AT A GEOGRAPHICALLY SEPARATE LOCATION FROM THE PAYLOAD TEST EARTH STATION -27 THE SENSED POWER LEVEL AND ORIENTATION ANGLES

THE SENSED POWER LEVEL AND ORIENTATION ANGLES CONTAINED IN THE DOWNLINKED TELEMETRY ARE PROCESSED AT THE SEPARATE RECEIVE EARTH STATION TO VERIFY THE OPERATION OF THE RECEIVE ANTENNA ON THE SATELLITE





Fig. 3

30 -31 THE GAIN OF A TRANSPONDER ON A SATELLITE IS CONFIGURED TO ESTABLISH A SUITABLE NOISE PEDESTAL AT A PAYLOAD TEST EARTH STATION THE TRANSMIT ANTENNA PATTERN IS POSITIONED -32 OVER THE PAYLOAD TEST EARTH STATION COMMANDS ARE UPLINKED TO THE SATELLITE FROM A -33 TELEMETRY AND COMMAND EARTH STATION THAT CAUSE A SLOW CONSTANT ATTITUDE TRANSLATION (SLEWING) OR DISCRETE STEPS IN ATTITUDE OVER PREDETERMINED ORIENTATION ANGLES 34 DOWNLINK NOISE OF THE TRANSPONDER IS TRANSMITTED TO THE PAYLOAD TEST EARTH STATION 18. WHERE IT IS MEASURED AND RECORDED DOWNLINK TELEMETRY CORRESPONDING TO THE 35, 36 ORIENTATION ANGLES IS GENERATED ON-BOARD THE SATELLITE AND TRANSMITTED TO A COMMAND AND TELEMETRY EARTH STATION THE NOISE POWER MEASUREMENTS AND SATELLITE -37 ATTITUDE ARE RECORDED AND PROCESSED TO VERIFY OPERATION OF THE TRANSMIT ANTENNA



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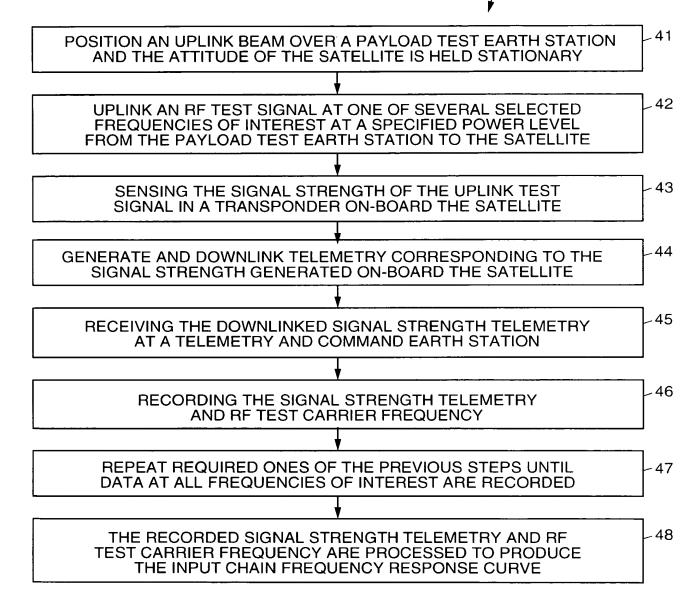






Fig. 5

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